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⊕	Application No. ⊕	Applicant(s)
Office Action Summary	09/616,883	KATO, TAKESHI
	Examiner	Art Unit
	Thierry L Pham	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-55_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-55_ is/are rejected.

7)☒ Claim(s) _3,4,16 and 17_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _2, 5, 6_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claims 3-4 and 16-17 are objected to because of the following informalities: "...updating controller updates first the second software program and then updates the first software program". It would be more concise and understandable if the limitations are recited as "...updating controller updates the second software program and then updates the first software program". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-22, 25-34, 36-45, 47-55 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Ohara et al (U.S. 6438643), and in view of Fukada et al (U.S. 6041175).

Regarding claim 1, Ohara discloses a management device (manager device, fig. 1, col. 16, lines 13-37) for managing a print system comprising a data processor (NIC 1 includes a CPU, fig. 1, col. 14, lines 14-63) connected to a network (fig. 1, col. 13, lines 58-67) and a printer for executing a print job sent from the data processor via the network, the data processor having a first software program which are installed therein (NIC 1 firmware store in ROM 6, fig. 1, col. 16, lines 13-65), and the printer having a second software program which are installed therein (printer firmware store in ROM 12, fig. 1, col. 15, lines 49-59), the device comprising: (2) updating controller (CPU 50 of manager G initiates an upgrading routines, figs. 2-5, col. 15, lines 60-67) for executing a predetermined process to update the first (NIC firmware update, fig. 8, col. 17, lines 21-67) and the second software programs (printer firmware update, fig. 8, col. 17,

lines 21-67) on the data processor and the printer based on the determination result by the determining controller.

However, Ohara does not explicitly disclose wherein (1) deciding controller for determining adaptability between old version and new version for the first software program and the second software program installed in the data processor and the printer;

Fukada, in the same field of endeavor for updating printer's software, discloses deciding controller (host computer, col. 7, lines 17-25) for determining adaptability between old version and new version for the first software program and the second software program installed in the data processor and the printer.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ohara as per teachings of Fukada because of a following reason: installing the latest/newest compatible printer driver will improve operating efficiency of the printer; (2) to reduce cost of manufacturing/operating (Ohara, col. 24, lines 8-35).

Therefore, it would have been obvious to combine Ohara with Fukada to obtain the invention as specified in claim 1.

Regarding claim 2, Ohara further discloses the management device according to claim 1, wherein the updating controller updates the first software program and the second software program in a predetermined order which is defined based on the determination result by the determining controller (update NIC and printer firmware, figs. 8-14, col. 17, lines 1-67 to col. 19, lines 1-67).

Regarding claim 3, Ohara further discloses the management device according to claim 2, wherein when the determining controller determines that there is no adaptability between the new version of the first software program and the old version of the second software program, the updating controller updates first the second software program and then updates the first software program (figs. 8-14 shows firmware can be update in any order, i.e., printer than NIC or NIC then printer, col. 17, lines 1-67 to col. 19, lines 1-67).

Regarding claim 4, Ohara further discloses the management device according to claim 2, wherein when the determining controller determines that there is no adaptability between the new version of the second software program and the old version of the first software program, the updating controller updates first the first software program and then updates the second software program (figs. 8-14 shows firmware can be update in any order, i.e., printer than NIC or NIC then printer, col. 17, lines 1-67 to col. 19, lines 1-67).

Regarding claim 5, Ohara further discloses the management device according to claim 1, wherein the updating controller controls execution and prohibition (fig. 14, col. 21, lines 23-67) of update of the first and the second software programs based on the determination result by the determining controller.

Regarding claim 6, Ohara further discloses the management device according to claim 5, wherein when the determining controller determines that the new version of the first software program is not adaptable to neither of the new version of the second software program and the old version of the second software program, the updating controller prohibits the first software program already installed from being updated (prohibiting updates if software/firmware are incompatible with devices, fig. 10 & 14, col. 21, lines 23-67 and col. 23, lines 1-62).

Regarding claim 7, Ohara further discloses the management device according to claim 5, wherein when the determining controller determines that the new version of the second software program is not adaptable to neither the new version or the old version of the first software program, the updating controller prohibits the second software program already installed from being updated (prohibiting updates if software/firmware are incompatible with devices via CRT, fig. 10 & 14, col. 21, lines 23-67 and col. 23, lines 1-62).

Regarding claim 8, Ohara further discloses 8, the management device according to claim 1, wherein the updating controller sends a message which prompts update of the first and the

second software programs to the data processor to display the message (Figs. 11-14, col. 21, lines 1-67), based on the determination result by the determining controller.

Regarding claim 9, Ohara further discloses the management device according to claim 1, further comprising a memory (ROM and RAM of Manager device, fig. 1, col. 17, lines 1-67 to col. 20, lines 1-67) for storing information about the adaptability between new version and old version for the first software program and the second software program, wherein the determining controller downloads the information about the adaptability via the network (LAN network, fig. 1, col. 13, lines 33-67) into the memory to determine the adaptability based on the downloaded (downloads files and adaptabilities from server, col. 19, lines 33-52) information.

Regarding claim 10, Ohara further discloses the management device according to claim 1, wherein the management device is incorporated in the printer (fig. 1 shows a printer having a CPU for processing updates and ROM for storing update software and its compatibilities, col. 16, lines 12-65).

Regarding claim 11, Ohara further discloses the management device according to claim 10, wherein the updating controller receives information about the version of the first software (figs. 8-12) program installed in the data processor, as well as the print job (col. 15, lines 14-25) sent from the data processor, and executes said predetermined process based on the received information about the version.

Regarding claim 12, Ohara further discloses the management device according to claim 1, wherein when the other data processor (NICs and computers, fig. 1, col. 13, lines 33-67) is connected to the network, the updating controller also executes the predetermined process to the other data processor.

Regarding claim 13, Ohara further discloses the management device according to claim 1, wherein the first software program (ROM 6 of NIC for storing processing software/firmware,

col. 14, lines 43-50 and col. 15, lines 49-58) controls the data processor to generate a print job corresponding to the printer, and the second software program controls (ROM 12 of printer for storing processing software/firmware, col. 15, lines 49-58) the printer to execute the print job generated by the first software program.

Regarding claims 14-22, recite limitations that are similar to those as described in claims 1-8 above; therefore, same rejection rationale/basis as described in claims 1-8 also applied to claims 14-22.

Regarding claims 25-30: Claims 25-30 are the methods corresponding to the apparatus 1-2, 5, 8-9, 13 (respectively). The methods are included by the operation of the apparatus as described in claims 1-2, 5, 8-9, and 13. Please see claims rejection basis/rationale as described in claims 1-2, 5, 8-9, 13 above.

Regarding claims 31-34: Claims 31-34 are the method claims corresponding to the apparatus claims 1-2, 5, 8 (respectively). The methods are included by the operation of the apparatus as described in claims 1-2, 5, 8. Please see claims rejection basis/rationale as described in claims 1-2, 5, 8 above.

Claims 36-41 correspond to method claims 25-30 except computer readable memory medium for storing program is claimed rather that printing system or data output apparatus and/or method. All computers/printers have some type of computer readable memory medium (RAM or ROM, Fig. 1) for storing computer programs, hence claims 36-41 would be rejected using the same rationale as in claims 25-30.

Claims 42-45 correspond to method claims 31-34 except computer readable memory medium for storing program is claimed rather that printing system or data output apparatus and/or method. All computers/printers have some type of computer readable memory medium (RAM or ROM, Fig. 1) for storing computer programs, hence claims 42-45 would be rejected using the same rationale as in claims 31-34.

Regarding claims 47-49, recite limitations that are similar to those as described in claims 1, 3, and 8 above; therefore, same rejection rationale/basis as described in claims 1, 3, and 8 also applied to claims 47-49.

Regarding claims 50-52: Claims 50-52 are the method claims corresponding to the apparatus claims 47-49 (respectively). The methods claims are included by the operation of the apparatus claims. Please see claims rejection basis/rationale as described in claims 47-49 above.

Claims 53-55 correspond to method claims 50-52 except computer readable memory medium for storing program is claimed rather that printing system or data output apparatus and/or method. All computers/printers have some type of computer readable memory medium (RAM or ROM, Fig. 1) for storing computer programs, hence claims 53-55 would be rejected using the same rationale as in claims 50-52.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 23-24, 35, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohara and Fukada as described in claims 1-22, 25-34, 36-45 above, and in view of Benjamin et al (U.S. 6113208).

Regarding claims 23-24, the combinations of Ohara and Fukada do not disclose wherein the management device comprising a activating controller for accessing periodically a WEB site on which the latest version of the first and the second software are registered, determining whether or not the first and the second software programs registered on the WEB site are

updated, and activating the determining controller and the updating controller when the first and second software programs are determined to be updated.

Benjamin, in the same field of networking and printing, discloses the management device (host processor, fig. 3) comprising a activating controller (microprocessor, fig. 3) for accessing periodically a WEB site (downloading updated/new version of printer driver via Internet/Web site, col. 3, lines 50-67 to col. 4, lines 1-40) on which the latest version of the first and the second software are registered, determining whether or not the first and the second software programs registered on the WEB site are updated, and activating the determining controller and the updating controller when the first and second software programs are determined to be updated.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Ohara as per teachings of Benjamin because of a following reason: (1) downloading and installing the latest/newest compatible printer driver will improve operating efficiency of the printer; (2) to reduce cost of manufacturing/operating (Ohara, col. 24, lines 8-35).

Therefore, it would have been obvious to combine Ohara and Fukada with Benjamin to obtain the invention as specified in claims 23-24.

Regarding claim 35: Claim 35 is a method claim corresponding to the apparatus claim 23. The method claims are inherent and included by the operation of the apparatus claims. Please see claims rejection basis/rationale as described in claim 23 above.

Claim 46 corresponds to method claim 35 except computer readable memory medium for storing program is claimed rather that printing system or data output apparatus and/or method. All computers/printers have some type of computer readable memory medium (RAM or ROM, Fig. 1 of Ohara) for storing computer programs, hence claim 46 would be rejected using the same rationale as in claim 35.

Conclusion

4.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) U.S. 6631008 to Aoki discloses an apparatus/method for upgrading software in printing system, figs. 7-12, cols. 5-8.
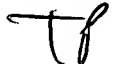
(2) U.S. 5580177 to Gase et al discloses an apparatus/method for upgrading/updating printer driver in the printing system, figs. 1-5, abstracts and cols. 2-4.

5.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897 or email Thierry.pham@uspto.gov The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham

February 12, 2004

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